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Patent Claims

- 1. Use of a biaxially oriented microporous film which comprises a propylene polymer and at least one β -nucleating agent and whose microporosity is generated by conversion of β -crystalline polypropylene during stretching of the film, for the labelling of containers during blow moulding.
- 2. Use according to Claim 1, characterized in that the porosity of the film is in the range from 500 to 1300 Gurley.
- 3. Use according to Claim 2, characterized in that the density of the film is in the range from 0.2 to 0.85 g/cm³.
- 4. Use according to Claim 2 and/or 3, characterized in that the film15 comprises a propylene homopolymer and/or a propylene block copolymer.
 - 5. Use according to Claim 1, characterized in that the film comprises a mixture of propylene homopolymer and propylene block copolymer and the ratio is in the range from 90:10 to 10:90.
 - 6. Use according to one or more of Claims 1 to 5, characterized in that the film comprises from 0.001% by weight to 5% by weight based on the weight of the β -nucleated layer, of β -nucleating agent.
- 7. Use according to one or more of Claims 1 to 6, characterized in that the nucleating agent is a calcium salt of pimelic acid or of suberic acid or is a carboxamide.
- 8. Use according to one or more of Claims 1 to 7, characterized in that the film is produced by the stenter process, and the take-off roll temperature is in the range from 60 to 130°C.

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9. Use according to one or more of Claims 1 to 8, characterized in that the applied label does not have an orange peel.

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10. Process for the production of a labelled container by means of the blow-moulding process, in which a thermoplastic polymer is extruded as melt tube through an annular die into a two-part mould, in which a film or at least one film section has been laid, and the melt tube is squeezed at one end by closing the two-part mould and air is introduced at the opposite end in such a way that the melt tube is inflated and adapts itself to the mould in such a way that a hollow body is shaped, and at the same time the laid-in label is applied, characterized in that the label consists of a biaxially oriented porous film which has an open-pored network-like structure produced during production of the film by conversion of β -crystalline polypropylene into alpha-crystalline polypropylene during the stretching.